

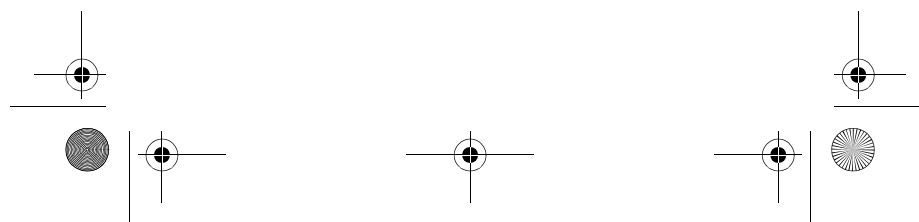
Cat. No. 14-1244 A  
**OWNER'S MANUAL**

Please read before using this equipment.

# SCP-97

**Auto Reverse AM/FM Stereo  
Cassette Player**

**OPTIMUS®**



## FEATURES

Your Optimus SCP-97 Auto Reverse AM/FM Stereo Cassette Player is a lightweight, portable AM/FM radio with a cassette player and built-in speaker. You can enjoy cassette tapes or the radio with others through the mono speaker or you can connect stereo headphones (not supplied) for private stereo listening.

Its features include:

**Extended Bass** — lets you increase your music's bass sound.

**Automatic Frequency Control (AFC)** — keeps the radio's receiver tuned to the selected broadcast frequency.

**Auto-Reverse Play** — automatically plays the other side of the tape when the side currently playing ends, for continuous playback.

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used by Tandy Corporation.

**Direction Switch** — lets you change the tape's direction to play the other side without removing the tape from the cassette player.

**Three Power Sources** — let you power the SCP-97 from two AA batteries (not supplied), standard AC power (using an optional AC adapter), or a vehicle's DC power (using an optional DC adapter).

**Removable Belt Clip** — allows hands-free carrying so you can take the SCP-97 anywhere you go.

**Note:** To listen to your SCP-97 privately or in stereo, you need a pair of headphones or amplified speakers (not supplied) with a 1/8-inch mini plug. Your local RadioShack store sells a wide variety of headphones and speakers.

## CONTENTS

|   |           |
|---|-----------|
| <b>Preparation .....</b>                      | <b>5</b>  |
| Power Sources .....                           | 5         |
| Using Internal Battery Power .....            | 5         |
| Using AC Power .....                          | 7         |
| Using Vehicle Battery Power .....             | 9         |
| Connecting Headphones/Speakers .....          | 11        |
| Listening Safely .....                        | 12        |
| Traffic Safety .....                          | 12        |
| Connecting the Antenna .....                  | 13        |
| Using the Belt Clip .....                     | 14        |
| <b>Radio Operation .....</b>                  | <b>15</b> |
| <b>Cassette Operation .....</b>               | <b>19</b> |
| Playing a Cassette Tape .....                 | 19        |
| Using Fast-Forward and Rewind .....           | 22        |
| Tape Tips .....                               | 23        |
| Tape Quality .....                            | 23        |
| Restoring Tape Tension and Sound Quality .... | 23        |
| <b>Care .....</b>                             | <b>25</b> |
| Cleaning the Tape-Handling Parts .....        | 26        |
| FCC Information .....                         | 28        |
| <b>Specifications .....</b>                   | <b>29</b> |

## PREPARATION

### POWER SOURCES

You can power your SCP-97 from any of these power sources:

- Internal battery power
- Standard AC power
- Vehicle battery power

**Note:** Connecting an adapter automatically disconnects internal battery power.

### USING INTERNAL BATTERY POWER

You can power the SCP-97 from two AA batteries (not supplied). For the best performance, we recommend RadioShack alkaline batteries.

**Cautions:**

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

Follow these steps to install batteries.

*illus*

1. Press down on the battery compartment cover and slide it off in the direction of the arrow.
2. Install the batteries as indicated by the polarity symbols (+ and -) marked next to the compartment, with the back battery over the ribbon.
3. Replace the cover.

When the sound distorts or weakens, replace the batteries.

**Warning:** Dispose of old batteries promptly and properly. Do not burn or bury them.

**Caution:** If you do not plan to use the SCP-97 for a week or more, or if you plan to power it using only an AC or DC adapter, remove the batteries. Batteries can leak chemicals that destroy electronic parts.

## USING AC POWER

You can power the SCP-97 using an 3V, 300-mA AC adapter and a size H Adaptaplug® (neither supplied). Both are available at your local RadioShack store.

### Cautions:



You must use a Class 2 power source that supplies 3V DC and delivers at least 300 mA. Its center tip must be set to negative and its plug must fit the SCP-97's

**DC3V** jack. Using an adapter that does not meet these specifications could damage the SCP-97 or the adapter.

- Always connect the AC adapter to the SCP-97 before you connect it to AC power. When you finish, disconnect the adapter from AC power before you disconnect it from the SCP-97.

Follow these steps to power the SCP-97 from a standard AC outlet.

1. Set the adapter's voltage switch to 3V.
2. Insert the size H Adaptaplug into the adapter's cord with the tip set to negative (–).
3. Insert the adapter's barrel plug into the SCP-97's **DC3V** jack.
4. Plug the adapter into a standard AC outlet.



## USING VEHICLE BATTERY POWER

You can power the SCP-97 from a vehicle's 12V power source (such as cigarette-lighter socket) using a 3V, 300-mA DC adapter and a size H Adaptaplug (neither supplied). Both are available at your local RadioShack store.

### Cautions:



You must use a power source that supplies 3V DC and delivers at least 300 mA. Its center tip must be set to negative and its plug must fit the SCP-97's **DC3V** jack. Using an adapter that does not meet these specifications could damage the SCP-97 or the adapter.

- Always connect the DC adapter to the SCP-97 before you connect it to the power source. When you finish, disconnect the adapter from the power source before you disconnect it from the SCP-97.


Follow these steps to power the SCP-97 from a vehicle's battery.

*illus*

1. Set the adapter's voltage switch to 3V.
2. Insert the size H Adaptaplug into the adapter's cord with the tip set to negative (-).
3. Insert the adapter's barrel plug into the SCP-97's **DC3V** jack.
4. Plug the adapter into a vehicle's cigarette-lighter socket.

## CONNECTING HEADPHONES/ SPEAKERS

You can enjoy the SCP-97's sound through its built-in monaural speaker. Or, you can connect stereo headphones or amplified speakers that have a  $\frac{1}{8}$ -inch stereo plug to the SCP-97 for stereo sound. Your local RadioShack store sells a wide variety of stereo headphones and amplified speakers.

Connect stereo headphones or amplified speakers with a  $\frac{1}{8}$ -inch stereo plug to the /ANT. jack.

*illus*

**Note:** Connecting headphones or external speakers automatically disconnects the internal speaker.

## Listening Safely

To protect your hearing, follow these guidelines when you use headphones.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.


## Traffic Safety

Do not wear headphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and could be illegal in some areas.

Even though some headphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.

## CONNECTING THE ANTENNA

When you connect headphones or amplified speakers, the headphones' or speakers' cord acts as the FM antenna, so be sure to fully extend the cord. When not using headphones or amplified speakers, you can connect the supplied antenna for better reception of FM stations.

To connect the supplied antenna, insert its  $\frac{1}{8}$ -inch plug into the  /ANT. jack.

*illus*

## USING THE BELT CLIP

The supplied belt clip lets you keep your hands free while you listen to the SCP-97. To attach the belt clip, slide it into the slots on the back of the SCP-97 and push up until it latches in place.

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To remove the belt clip, push down on the tab and slide it off in the direction of the arrow marked on the tab.

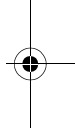
1. Set **TAPE**•**RADIO** to **RADIO**.

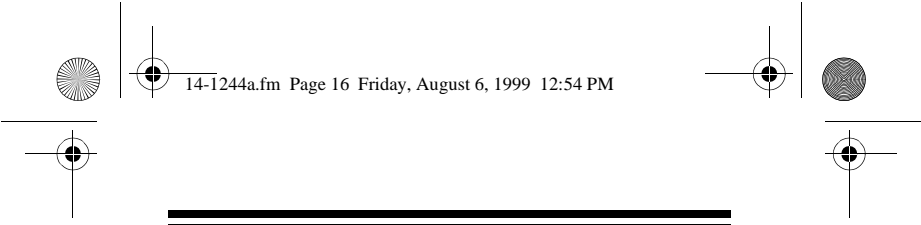
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2. Adjust **VOLUME** to its lowest level.



*illus*





3. Set **FM ••• AM** to select the desired band.

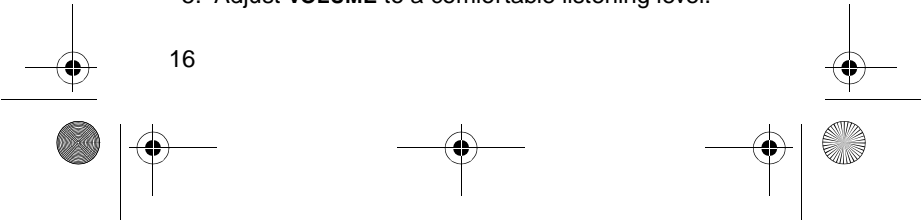
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| Position | Band      |
|----------|-----------|
| Left     | FM STEREO |
| Center   | FM MONO   |
| Right    | AM        |

4. Turn **TUNING** to select the desired station.

*illus*

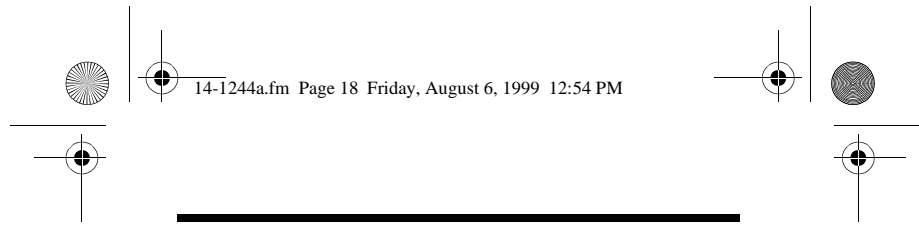
5. Adjust **VOLUME** to a comfortable listening level.





**Notes:**

- The AM antenna is built-in. Rotate the cassette player to improve AM reception.
- For the best FM reception, fully extend the FM antenna wire or the headphones' or speakers' cord (whichever is connected).
- The FM STEREO indicator lights when the SCP-97 receives an FM broadcast in stereo.
- To improve reception of weak FM radio stations, set **FM • • • AM** to the center position to select the FM monaural band. The sound is no longer in stereo, but reception should improve.

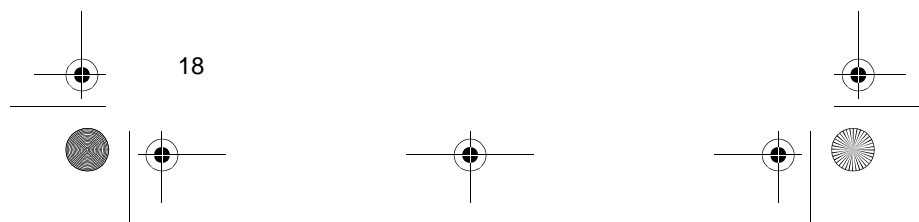


6. Set **EXTENDED BASS** to **ON** for an enhanced bass effect. Set it to **OFF** for normal bass sound.

*illus*



7. Set **TAPE • RADIO** to **TAPE** to turn off the radio.



## CASSETTE OPERATION

### PLAYING A CASSETTE TAPE

1. Take up any slack in the tape by turning the cassette's hub with a pencil. Do not touch the exposed tape.

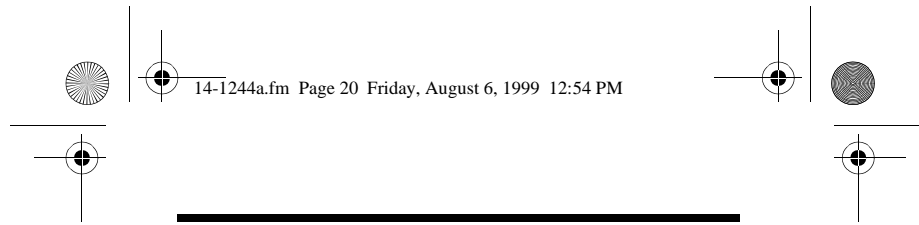
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2. Pull open the cassette compartment door.

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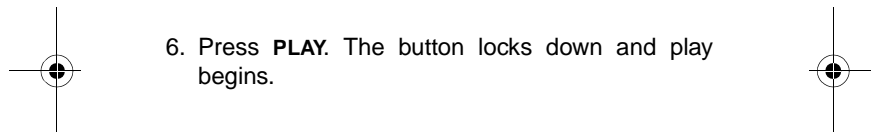
3. With its open edge facing up, insert the cassette tape into the cassette guides on the door.

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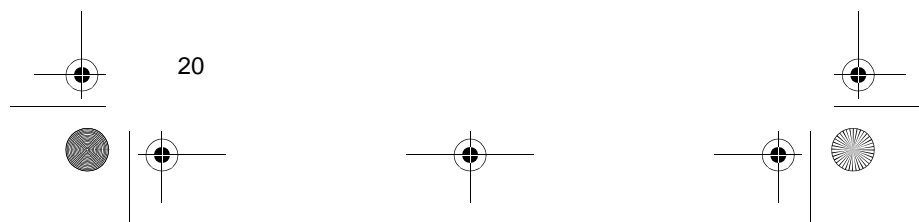
4. Close the door.
5. Set **TAPE • RADIO** to **TAPE**.

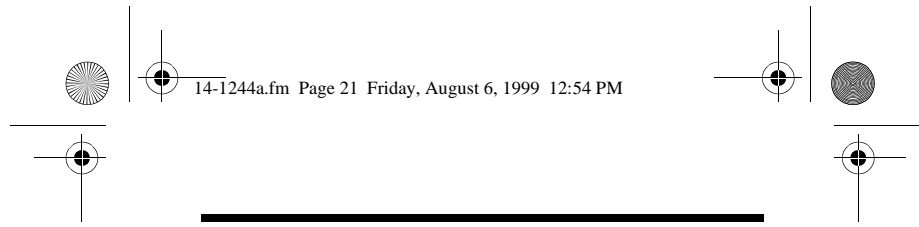
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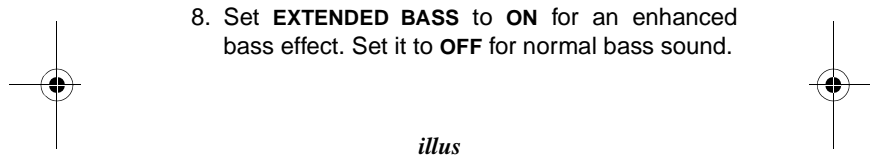
**Note:** The SCP-97 automatically plays the tape's other side when the current side ends. To play the other side sooner, set **DIRECTION** to its other position.



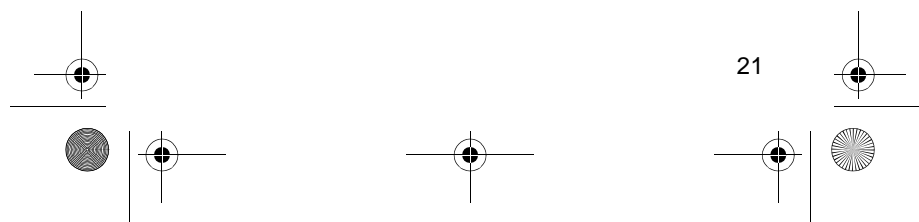


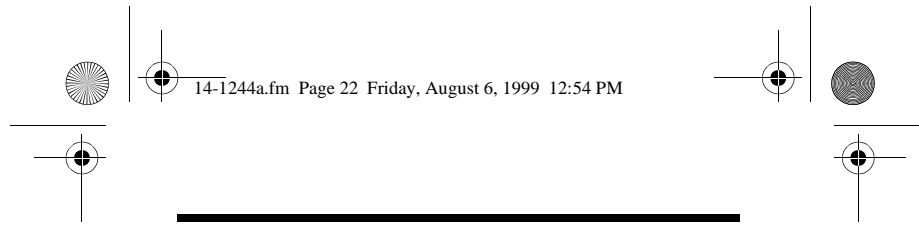
7. Adjust **VOLUME** to the desired listening level.

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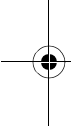
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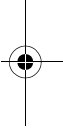
9. To stop playback, press ■ **STOP**.

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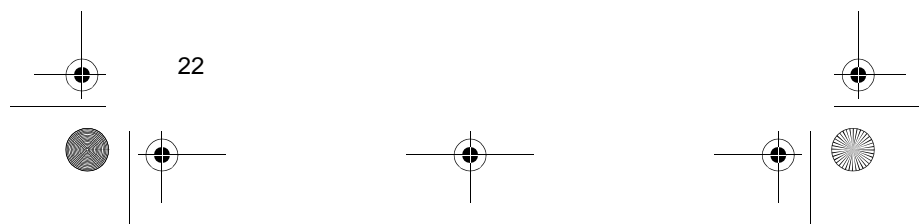


## USING FAST-FORWARD AND REWIND

To fast-forward the tape, press ►► or ◀◀ (whichever is the same direction as tape play). To rewind the tape, press ►► or ◀◀ (whichever is the opposite direction of tape play.)



*illus*



The tape automatically stops when it reaches the end (but you must press **■ STOP** to release **▶▶** or **◀◀**). To stop the tape before it reaches the end, press **■ STOP** sooner.

## TAPE TIPS

### Tape Quality

For the best performance, use only regular length (60- or 90-minute) cassette tapes. We do not recommend long-playing cassette tapes, such as C-120s, because they are extremely thin and can easily tangle in the playback mechanism.

### Restoring Tape Tension and Sound Quality

After you play a cassette tape several times, the tape might become tightly wound on the reels. This can cause playback sound quality to deteriorate.

To restore the sound quality, fast-forward the tape from the beginning to the end of one side, then completely rewind it. Then loosen the tape reels by gently tapping each side of the cassette's outer shell on a flat surface.

**Caution:** Be careful not to damage the cassette when tapping it. Do not touch the exposed tape or allow any sharp objects near the cassette.



## CARE

Your Optimus SCP-97 Auto-Reverse AM/FM Stereo Cassette Player is an example of superior design and craftsmanship. The following suggestions will help you care for the SCP-97 so you can enjoy it for years.

- Keep the SCP-97 dry. If it gets wet, wipe it dry immediately.
- Use and store the SCP-97 only in normal temperature environments.
- Handle the SCP-97 gently and carefully. Don't drop it.
- Keep the SCP-97 away from dust and dirt.
- Occasionally wipe the SCP-97 with a damp cloth to keep it looking new.

Modifying or tampering with the SCP-97's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your SCP-97 is not performing as it should, take it to your local RadioShack store for assistance.

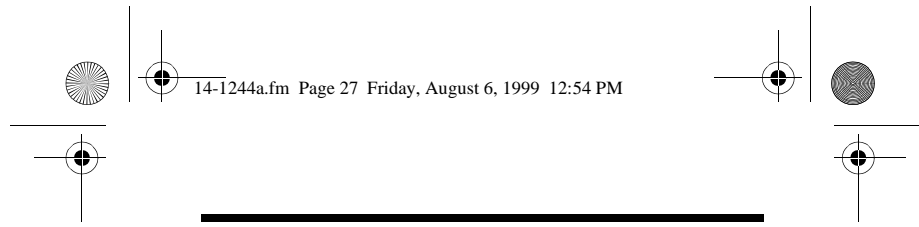
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## CLEANING THE TAPE-HANDLING PARTS

Dirt, dust, or particles of the tape's coating can accumulate on the tape head and other parts that the tape touches. This can reduce the SCP-97's performance.

Follow these steps to clean the tape-handling parts after about every 20 hours of tape player operation.

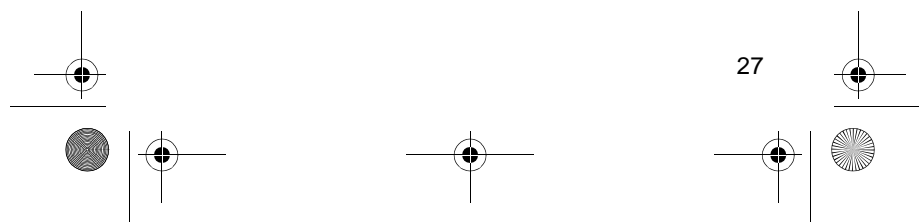
1. Remove the batteries and disconnect any other power source.
2. Open the cassette compartment door.
3. Press **PLAY** to expose the tape-handling parts.
4. Use a cotton swab dipped in denatured alcohol or tape head cleaning solution to clean the playback head, pinch rollers, capstans and tape guides.



*illus*

5. When you finish cleaning, press ■ **STOP** and close the compartment, then reconnect power.

**Note:** Your local RadioShack store has a complete line of cassette deck cleaning accessories.



## FCC INFORMATION

This equipment complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- Reorient or relocate the receiving antenna
- Increase the distance between the equipment and the radio or TV
- Use outlets on different electrical circuits for the equipment and the radio or TV

Consult your local Radio Shack store if the problem still exists.

## SPECIFICATIONS

### GENERAL

Power Requirements ..... 3 Volts DC, 300 Milliamps  
Two AA Batteries, 3-Volt AC Adapter,  
or 3-Volt DC Adapter

Battery Life (Alkaline) ..... About 14 Hours

Dimensions .....  $3\frac{1}{2} \times 5\frac{1}{8} \times 1\frac{9}{16}$  Inches  
(88 × 129.5 × 40 mm)

Weight (Without Batteries) ..... 9.7 oz  
(274 g)

### RADIO

AM

Frequency Range ..... 530–1710 kHz Sensitivity  
@ 20dB

S/N ..... 800  $\mu$ V/m Selectivity  $\pm 10$  kHz 18 dB

Headphone Output Power @ 10% THD ..... 18 mW

Speaker Output Power @ 10% THD ..... 30 mW

## FM

Frequency Range ..... 88–108 MHz  
Usable Sensitivity ..... 15 mW  
Output Power @ 10% THD ..... 10 mW  
Selectivity  $\pm$  400 kHz ..... 15 dB

## CASSETTE PLAYER

Tape System ..... 4-Track, Stereo  
Tape Speed .....  $1\frac{7}{8}$  Inches per Second  
Frequency Response ..... 125 Hz to 6.3 kHz  $\pm$ 3dB  
Signal-to-Noise Ratio ..... 40 dB  
Wow and Flutter ..... 0.4%

Specifications are typical; individual units might vary.  
Specifications are subject to change and improvement without notice.

### Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

*(Continued)*

(Continued) This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations,  
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Printed in Hong Kong